

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 59215674
PUBLICATION DATE : 05-12-84

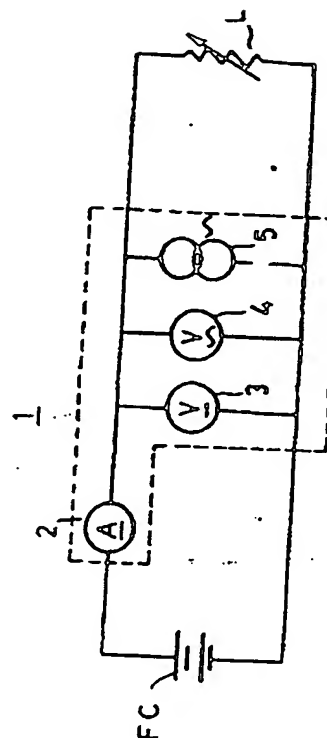
APPLICATION DATE : 20-05-83
APPLICATION NUMBER : 58089481

APPLICANT : SANYO ELECTRIC CO LTD;

INVENTOR : WASHIMI SHINGO;

INT.CL. : H01M 8/04 G05D 23/19

TITLE : TEMPERATURE CONTROL DEVICE OF FUEL CELL



ABSTRACT : PURPOSE: To detect the cell temperature from outside by measuring the internal impedance of a cell.

CONSTITUTION: An impedance measuring device 1 is connected between a fuel cell FC and a load L and is composed of a DC ammeter 2, a DC voltmeter 3, an AC voltmeter 4, and a constant-frequency, constant-current AC generator 5. The AC generator 5 feeds currents in parallel to the cell FC and the DC load L, and the AC voltage displayed on the AC voltmeter 4 is generated by the resultant impedance Z_r of the internal impedance Z of the fuel cell FC and the load resistance R . Accordingly, individual detection signals from the impedance measuring device 1 are inputted to a control unit 6 to calculate the internal impedance Z of the cell. The value of this Z depends on the cell temperature, thereby this Z is used as an output signal to regulate a damper 7 and a blower 8 so as to control the feed air temperature and air quantity.

COPYRIGHT: (C)1984,JPO&Japio